#mathscpdchat 27 June 2023

A level 'Taster Days' for Y11 students: do you run them?

If so, what do you do?

Hosted by Jenny Hill-Parker

*This is a summary of the discussion – to see all the tweets, follow the hashtag **#mathscpdchat** in Twitter*

The links shared during this discussion were:

Taster lessons to give you a flavour of studying maths beyond GCSE which is resource material for students from the Advanced Mathematics Support Programme (AMSP). The lessons provide opportunities for students to try out some of the topics they will meet on a Level 3 Maths course. There are two lessons for each of A level Mathematics, A level Further Mathematics, and Core Maths. It was shared by Jenny Hill-Parker and Jerome Foley

Transition to A level Mathematics: Essential Skills which is resource material for students and teachers from the AMSP. These resources were designed for students to complete independently, and will develop fluency in the fundamental techniques and key mathematical concepts that underpin A level Mathematics. It was shared by Rachel Beddoes and Jerome Foley

Supporting your students transition to level 3 maths which is resource material for teachers from the AMSP. It contains links to their Essential Skills materials (described above) and their *Transition to A level Mathematics* course, and relevant notes for teachers. There are also brief descriptions of, and links to, other associated relevant AMSP resources. It was shared by Rachel Beddoes and Hannah

Taster Lessons which is a page on Colleen Young's *Mathematics, Learning and Technology* website. Colleen suggests, describes, and provides links to, some mathematical tasks for students to explore on 'taster days as part of a Sixth Form Welcome Event'. The tasks presented include some that involve exploring the graphs of functions using the WolframAlpha plot application, and various Underground Mathematics tasks. It was shared by Jenny Hill-Parker

Bridging the Gap... Revisited which is a blog by @mathsjem on her *Resourceaholic* website. It is about testing students when they are about to start on A level Maths courses in order 'to allow for (early) highly targeted intervention' where necessary. It was shared by Jenny Hill-Parker

Free videos to assist the transition from GCSE to A level maths which is a resource on the Pearson UK website. Ten 'chapters' are provided. They focus on activities 'which help students to master the key skills that are needed in both AS and A level Mathematics. Each chapter contains between 10 and 15 videos for students to watch and 'a downloadable PDF of example questions, practice questions and … exam questions for consolidation'. It was shared by Jenny Hill-Parker

Powerful quadratics which is a problem on the Underground Mathematics website. It is based on this NRICH resource. The challenge is to find all the solutions to an equation in which a quadratic expression in x, raised to a power which is a different quadratic expression in x, is equal to 1. It was shared by Rob Southern

Teddy bear which is also a problem on the Underground Mathematics website. Learners are invited to match some circles (that are shown on a Cartesian grid) with given equations. But, although the circles are drawn to scale, so their relative sizes are true, the axes are not labelled. Comprehensive 'teacher support' notes are provided. It was shared by Sheena

Picture the process which is an ordered sequence of connected tasks on the Underground Mathematics website. The learner 'travels' through 'environments', starting from 'processes' (such as the cooling of a cup of tea as time passes), through graphs representing processes, to the equations of graphs, and finally to seeing process/graph/equation examples as a whole. It was shared by Hannah

Transition from GCSE to A level Mathematics which is a blog from OCR by Steven Walker, OCR's Maths Subject Advisor. It was shared by Jenny Hill-Parker

Getting a taste which is a blog by Mo Ladak on his MathedUp website, in which he shares what he has done in A level taster sessions over several years. It was shared by Jenny Hill-Parker

Free GCSE to A level Transition Booklet which is a downloadable booklet from Sparx Maths. The authors have 'selected over 120 questions from within Sparx Maths to help any student transitioning from GCSE to A level'. It was shared by Jenny Hill-Parker

A level taster task booklets which are four 'booklets' created by Ben Sinclair and available to download as PDF files. The booklet headings are 'Differentiation Taster', 'Logarithms Taster', 'Proof' and 'What is infinity? What is a limit?'. Each booklet consists of a variety of attractively presented tasks. It was shared by Ben Sinclair

A/AS level Maths Preparation which is from where you can download a document written by Paddy MacMahon for students at Latymer Upper School in order to prepare them for A level Maths. The students are instructed to 'work through all the questions on the sheet, answering the questions on squared paper. They are not meant to be as straightforward as GCSE questions, but should only require GCSE knowledge, together with a willingness to think'. It was shared by Paddy MacMahon

GCSE to A level which is a collection of material, gathered and/or created by Adam Creen. There is a list of online resources (with links to them), 'baseline assessments to use with Year 12, video playlists, and a list of physical books'. It was shared by Adam Creen, known on Twitter as RobotMaths

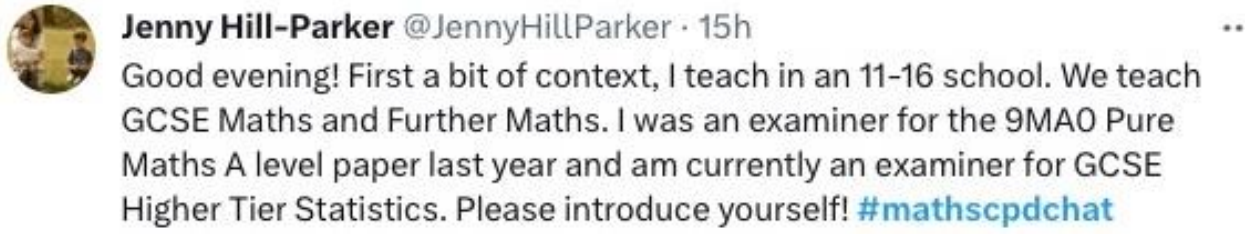
Key Ideas in Teaching Mathematics: Research-Based Guidance For Ages 9-19 which is a book by Anne Watson, Keith Jones and Dave Pratt. They provide research-based guidance, explanations and examples of the ideas that really matter for students from age 9 to 19, and that can be obstacles to future learning. It was shared by Mary Pardoe

Ideas for Sixth Form Mathematics: Pure Mathematics and Statistics which is a book by Colin Foster from the Association of Teachers of Mathematics (ATM). It offers a wealth of innovative lesson ideas for important areas of post-16 mathematics teaching, bringing variety to the Pure Mathematics and Statistics curriculum areas within AS/A2 Mathematics and IB. It was shared by Mary Pardoe

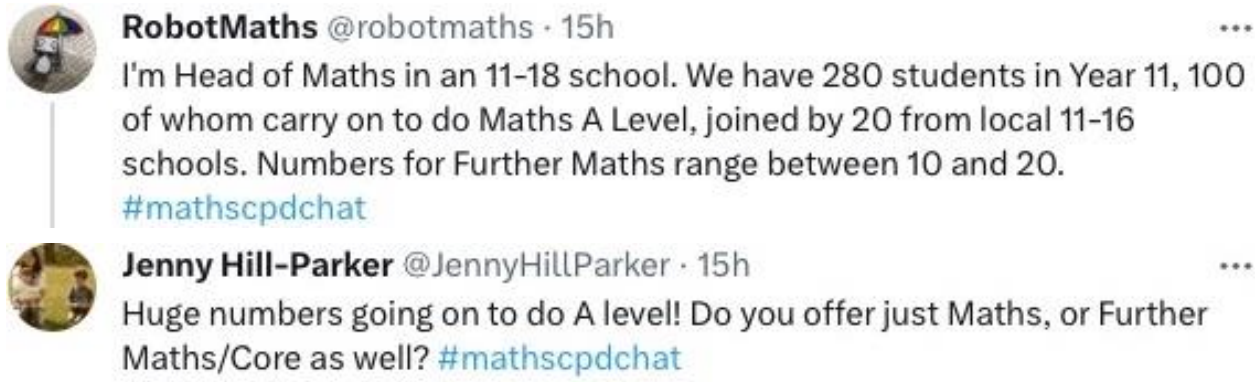
Ideas for Sixth Form Mathematics: Further Pure Mathematics and Mechanics which is another book by Colin Foster from the Association of Teachers of Mathematics (ATM). It offers a wealth of innovative lesson ideas for important areas of post-16 mathematics teaching, bringing variety to the Further Mathematics and Mechanics curriculum areas. It was shared by Mary Pardoe

An illustrated summary of the discussions in this #mathsCPDchat follows.

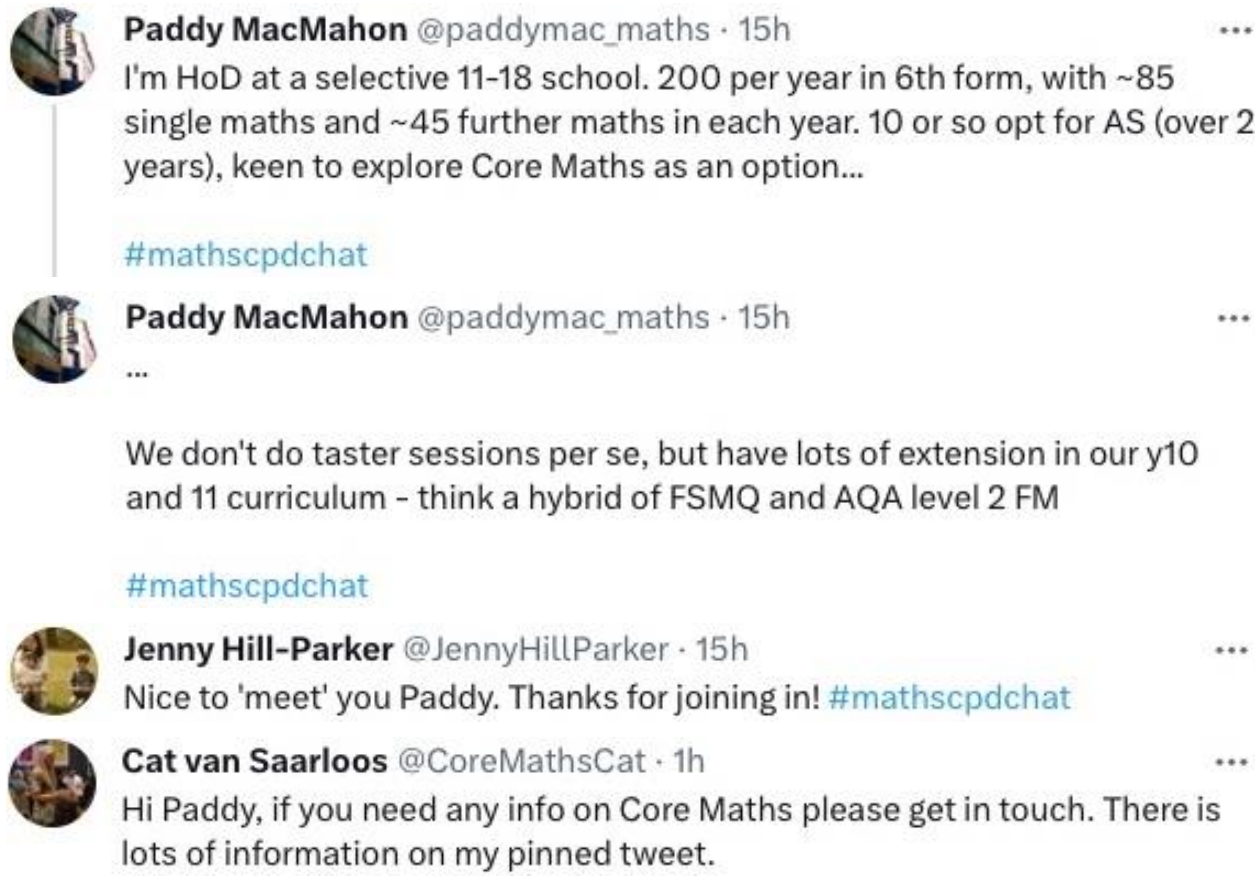
The host's opening message …



… prompted this 'introduction' …



… and this:



It also prompted the following comments which recalled the #mathsCPDchat of the previous week, and informed teachers about a free new resource …

Economist Foundation @Econ_Foundation · 16h

This is a great summary highlighting the importance of maths skills and numerical literacy beyond the classroom! Thank you @Maryse for hosting & @mathscpdchat for sharing these insightful resources. We're excited to join the **#mathscpdchat** today in celebration of #MathsWeekLDN!... Show more

> **mathscpdchat** @mathscpdchat · Jun 23
>
> This week's #mathsCPDchat asked 'Which topics in GCSE maths are students most likely to find useful in adult life?' There's a summary, including links mentioned, atncetm.org.uk/media/slpeydxv. Thanks @Maryse for hosting!

Economist Foundation @Econ_Foundation · 16h

Our recent Special Edition is a free 6-hour scheme of work which helps students develop their critical thinking skills, maths confidence and understanding of how numeracy can be used to make sense of the world. Download for free to help build #MathsConfidence in your classroom... Show more

… and to which the host responded at the end of the chat:

Jenny Hill-Parker @JennyHillParker · 15h

I hope you found today's chat useful! #mathscpdchat

Jenny's first main question …

Jenny Hill-Parker @JennyHillParker · 16h

Q1 - Does your school run A level taster days/sessions for year 11 students, and if so what activities do you do with them? #mathscpdchat

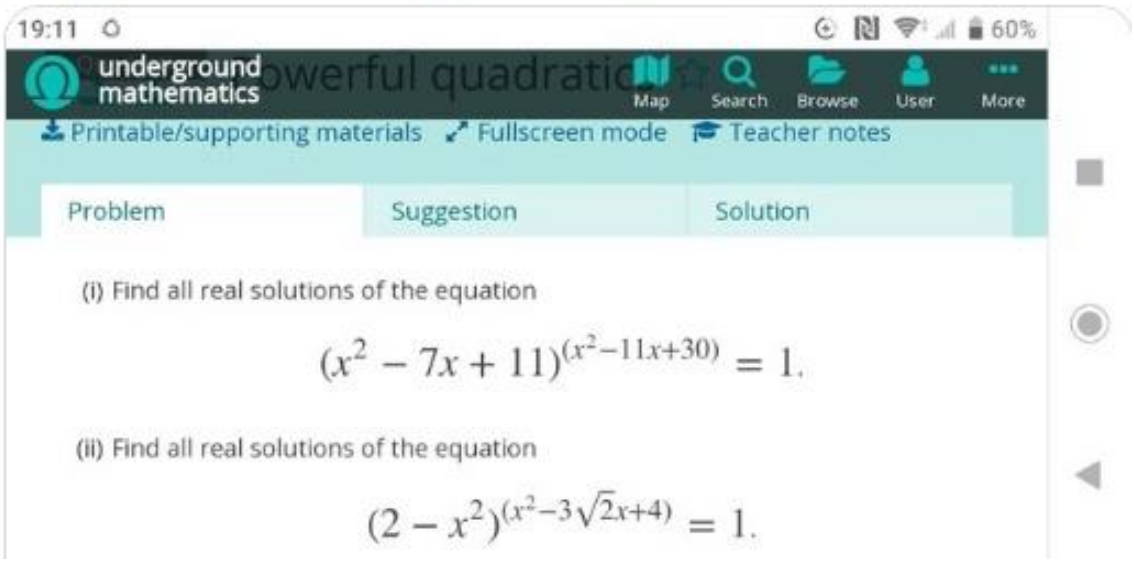
… generated approximately 40 responses. Many of these replies included links to, and comments about, resources that teachers had used, and had found to interest, and help to prepare effectively, Y11 students who were about to embark on A level Mathematics courses. For example, there was this short discussion …

Rob Southern @mrsouthernmaths · 16h

I like using Powerful Quadratic from Underground Maths. It's nice because it uses familiar maths in an unfamiliar context. A nice extension is to write their own question with 6 unique solutions (Q1 here has 5)

#mathscpdchat

undergroundmathematics.org/quadratics/pow...



Jenny Hill-Parker @JennyHillParker · 16h

Hi Rob! I was hoping you would join in!
These resources look amazing #mathscpdchat

Sam Blatherwick @blatherwick_sam · 16h

Love this task and it blew my mind when I first saw it, v creative

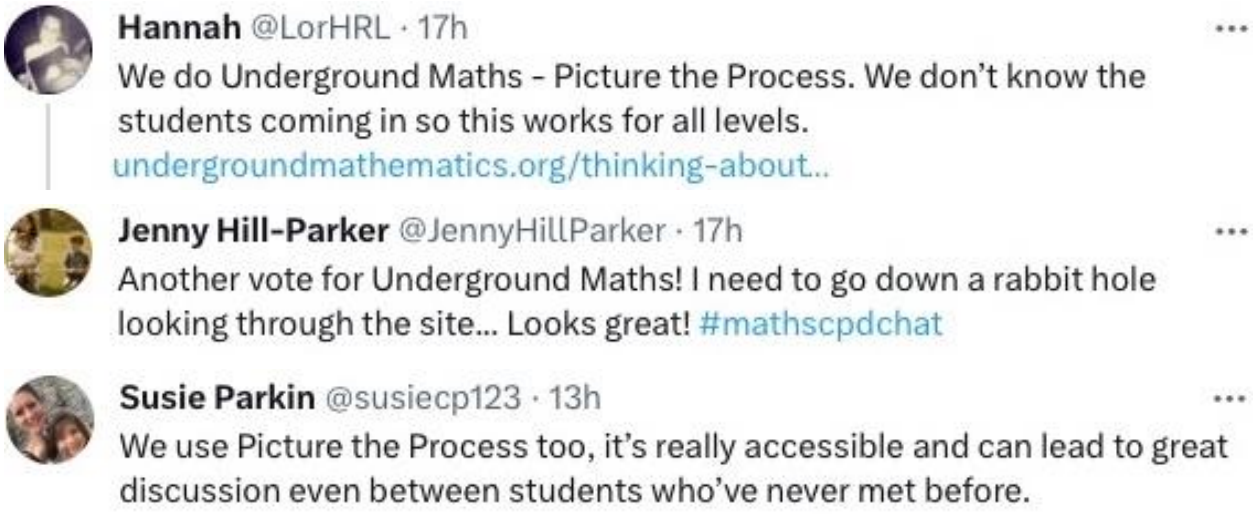
Sheena @Sheena2907 · 16h

It's a great question

Jenny Hill-Parker @JennyHillParker · 16h

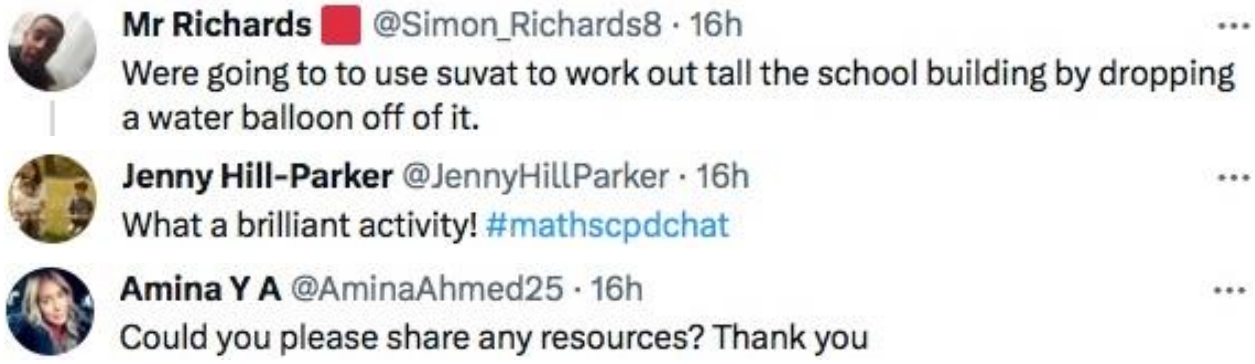
I am just doing it now! Lovely question! #mathscpdchat

… and other teachers mentioned the same website … as a source of useful, appropriate and interesting material:



The next reply prompted the host to link to another great source of effective and engaging material for 'about-to-be' A level Maths students:

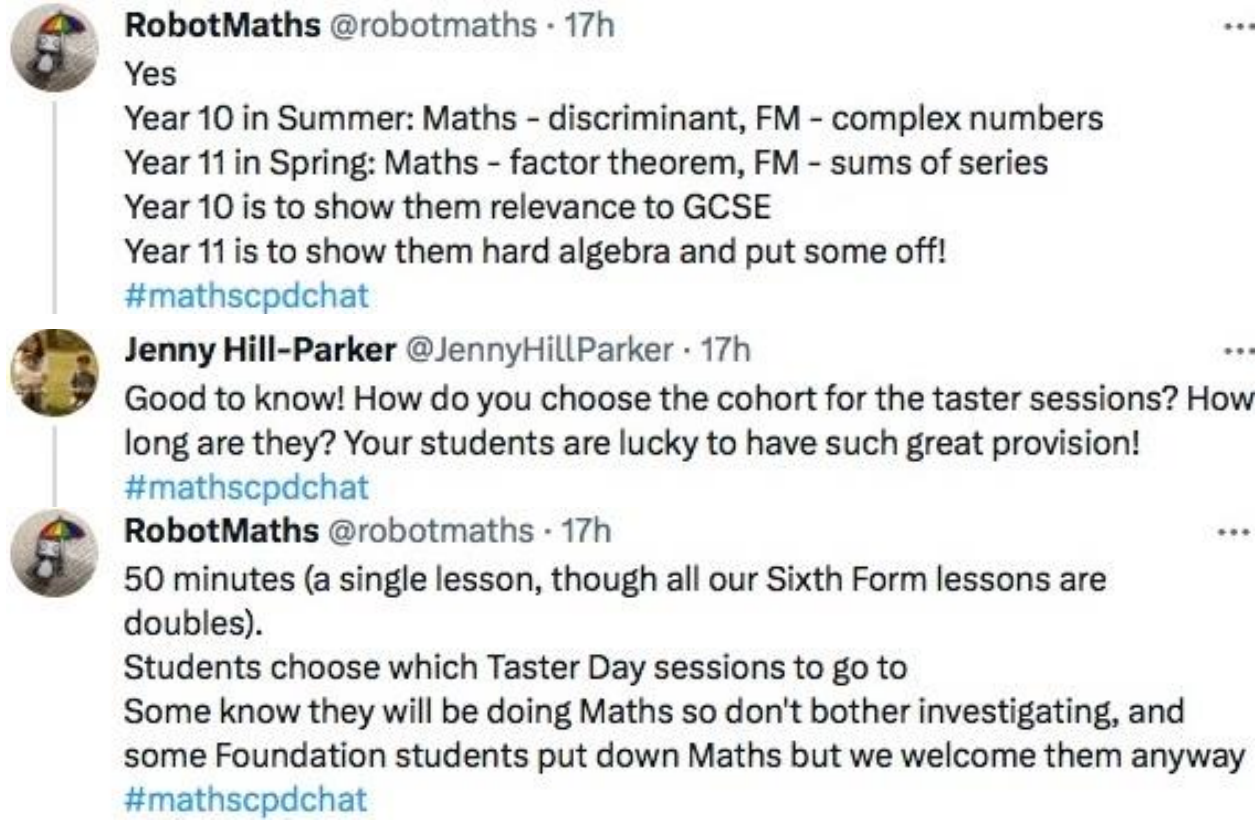
The following reply conveys a teacher's own idea, which does not necessarily depend on a particular published resource:



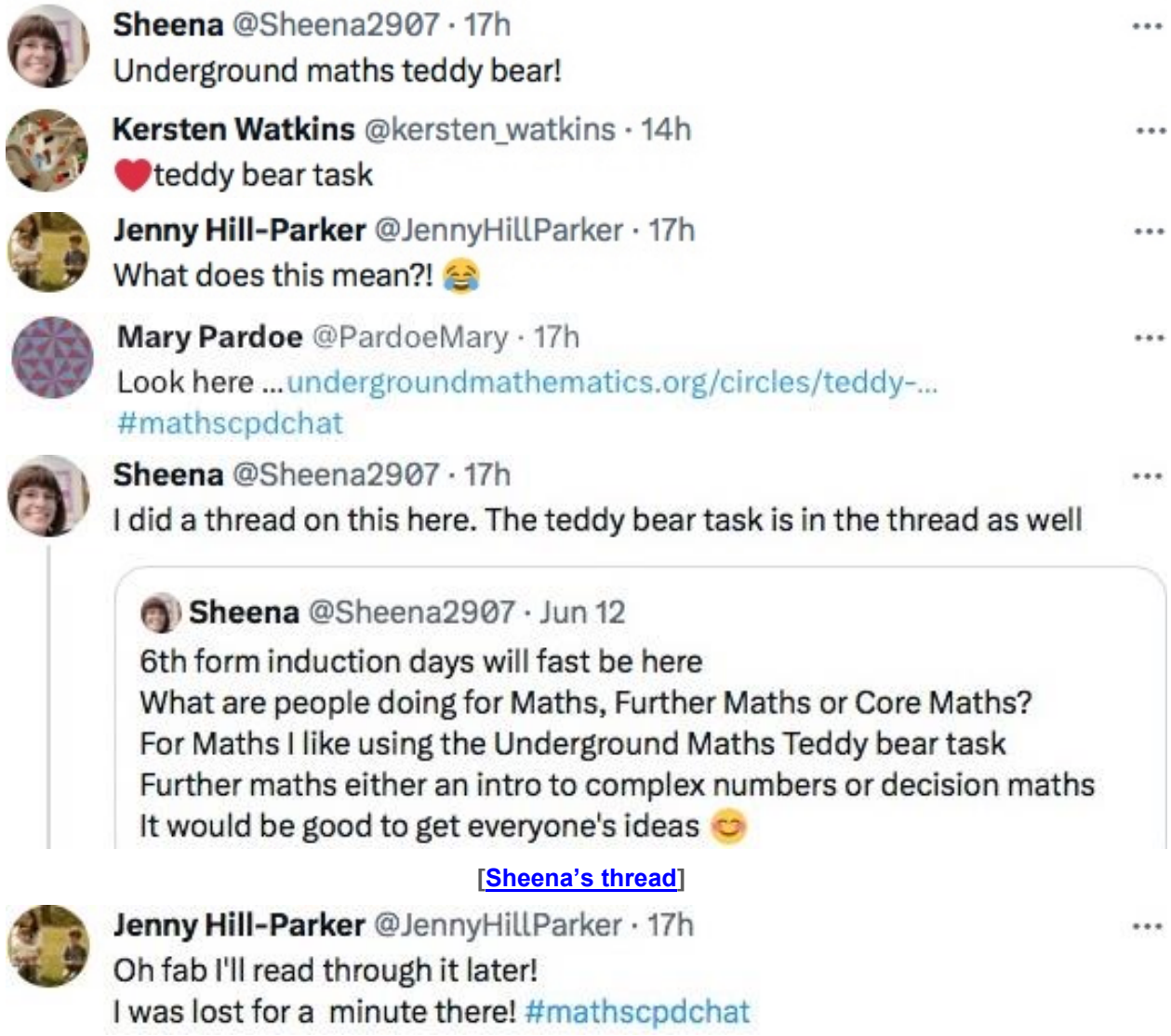
Some replies were about topics that teachers have found engage potential A level students, rather than about the exact tasks or questions used. For example, there was this short conversation …

… and this …

… and a carefully worked-out plan:



Another *Underground Maths* task is used on A level 'Taster Days' by some teachers …



[Sheena's thread]

… and the link to a further source of suitable engaging tasks was shared:

> But the same reasons why younger learners might benefit from exploratory and open-ended styles of mathematics lesson also apply to sixth formers. Working in more genuinely mathematical ways, in which students exercise choice and make decisions to solve problems, will be much more satisfying and worthwhile than merely completing dull routine exercises. There are huge opportunities for interesting and varied mathematics lessons in the sixth form, yet it has always been harder to find good quality materials for these classes. Although they may enjoy the mathematical content, many mathematics teachers would say that their sixth-form lessons are often less creative, less imaginative, less practical, less open-ended and less varied than their lessons with younger learners.

Mary Pardoe @PardoeMary · 18h

These are some 'shots' of the start of one of the (extended) tasks in this book ... #mathscpdchat

2 × 2 Matrices

- Explore the effect of operating with each of the matrices below on any vectors of your choice.
- What transformations do the matrices produce? Why?

$$\begin{pmatrix}1&0\\0&1\end{pmatrix},\ \begin{pmatrix}-1&0\\0&1\end{pmatrix},\ \begin{pmatrix}1&0\\0&-1\end{pmatrix},\ \begin{pmatrix}-1&0\\0&-1\end{pmatrix},\ \begin{pmatrix}0&1\\1&0\end{pmatrix},$$

$$\begin{pmatrix}0&-1\\1&0\end{pmatrix},\ \begin{pmatrix}0&1\\-1&0\end{pmatrix},\ \begin{pmatrix}0&-1\\-1&0\end{pmatrix},\ \begin{pmatrix}1&1\\1&1\end{pmatrix},\ \begin{pmatrix}2&0\\0&2\end{pmatrix},\ \text{etc.}$$

- Try to find matrices that will cause *other* transformations, such as a rotation 60° anticlockwise about the origin or a reflection in the line $y = 3x$.
- Find the *determinant* of each matrix and relate your answers to the transformations.

2D transformations

- Draw a simple (non-symmetrical) shape with integer coordinates for its vertices. (Make it simple, but not too simple!)
- Rotate it 90° anticlockwise about the origin.
- Look at the new coordinates of the vertices and describe how they relate to the starting coordinates.
- Try other rotations, such as 90° clockwise, 180°, etc. – always about the origin.
- Try reflections in the x and y axes and in the lines $y = x$ and $y = -x$.
- What happens to the coordinates in each case? Why?

One way to describe the results of these transformations is to use 2 × 2 matrices.

These are (in order): identity (the 'boring matrix' – no change), reflection in the y-axis, reflection in the x-axis, rotation 180° about the origin, reflection in the line $y = x$, rotation 90° anticlockwise about the origin, rotation 90° clockwise about the origin, reflection in the line $y = -x$, reduction to the line $y = x$ and enlargement with scale factor 2 centred on the origin.

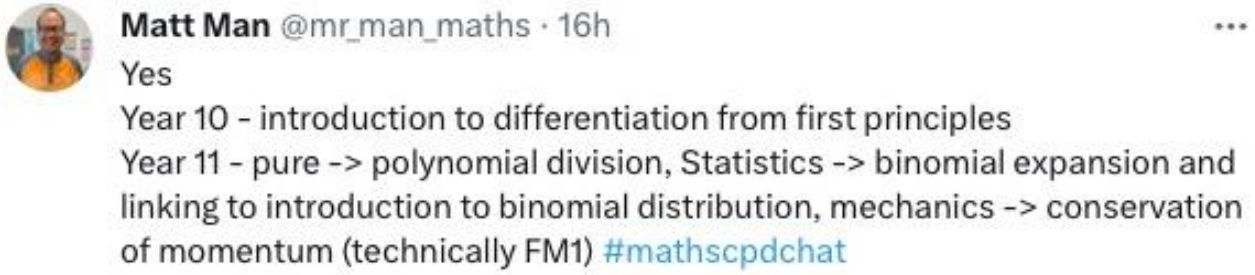
In general, a rotation of θ anticlockwise about the origin is performed by the matrix $\begin{pmatrix}\cos\theta&-\sin\theta\\\sin\theta&\cos\theta\end{pmatrix}$. Since $\begin{pmatrix}a&c\\b&d\end{pmatrix}\begin{pmatrix}1\\0\end{pmatrix}=\begin{pmatrix}a\\b\end{pmatrix}$ and $\begin{pmatrix}a&c\\b&d\end{pmatrix}\begin{pmatrix}0\\1\end{pmatrix}=\begin{pmatrix}c\\d\end{pmatrix}$, it is possible to see the two columns of the matrix $\begin{pmatrix}a&c\\b&d\end{pmatrix}$ as describing what happens to the **i** and **j** vectors respectively under transformation by the matrix. Thinking this way, it is not too hard to work out mentally the effect of each of the matrices above.

In general, a reflection in the line $y = mx$ is performed by the matrix $\frac{1}{1+m^2}\begin{pmatrix}1-m^2&2m\\2m&m^2-1\end{pmatrix}$.

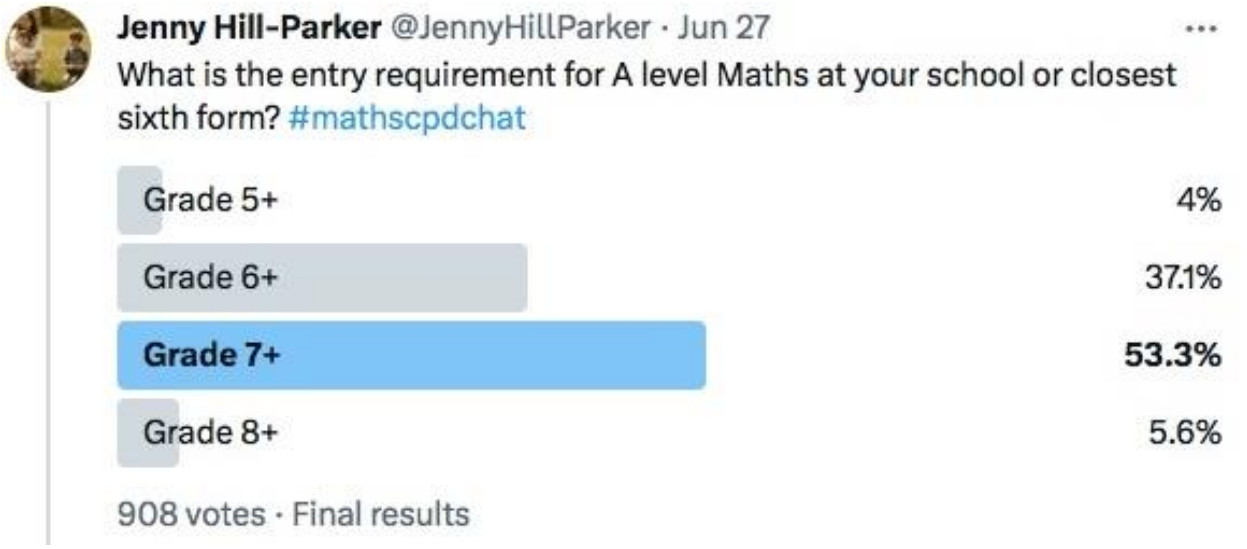
Alternatively, you could express the matrix in terms of the angle θ that the mirror makes with the positive x-axis, so that $m = \tan\theta$, in which case the matrix would be $\begin{pmatrix}\cos 2\theta&\sin 2\theta\\\sin 2\theta&-\cos 2\theta\end{pmatrix}$.

There were four 'single' replies to Jenny's first main question (which is repeated here as a reminder) …

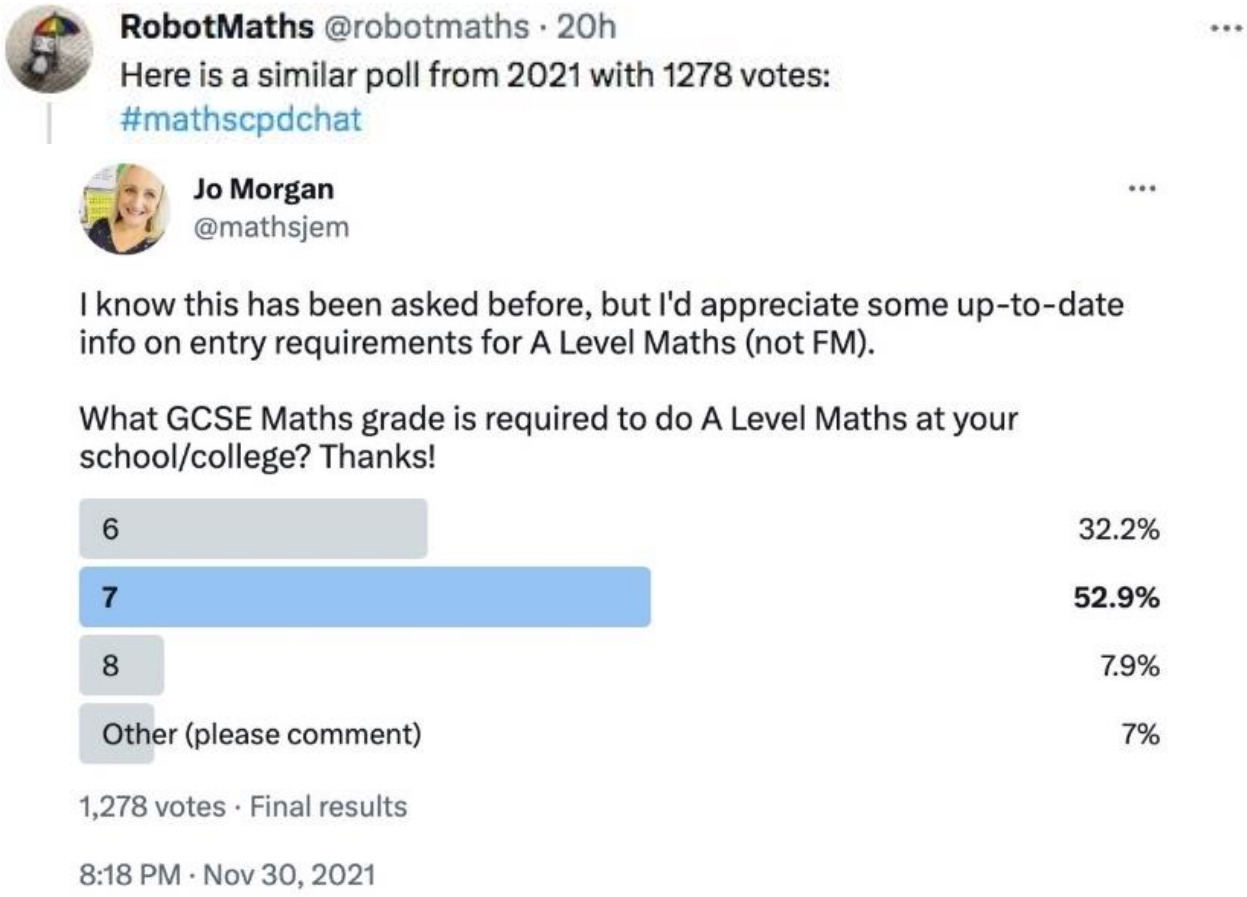
… which were:



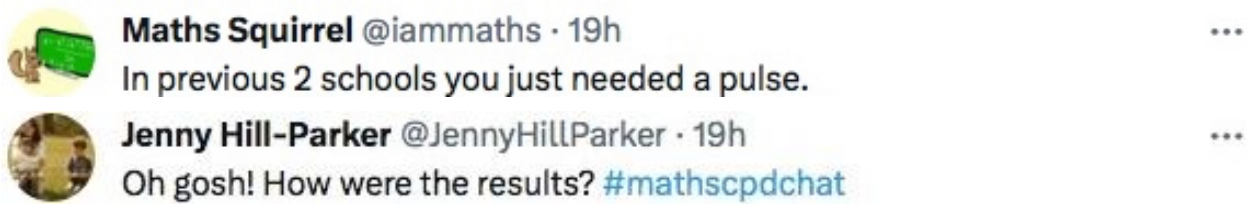
Jenny's second main question …



prompted a teacher to share a similar poll from 2021:



There were two other replies that in turn prompted more comments, and one single reply. This was a conversation about low (or no) entry requirements …



Maths Squirrel @iammaths · 19h
By some miracle no one has actually failed but nothing above a B either. Our just finished year 13's had 2 that only did the foundation paper

LTT @Long_Tailed_Tit · 15h
That's impressive to get two foundation students that far!

… whereas these thoughts were about raising the required GCSE attainment level …

Michael Slavinsky @michaelslav · 19h
We just changed from 6+ to 7+. Really good reasoning on it from @domwilliamsinic & @JamesMacNaughto to prompt the switch

Jenny Hill-Parker @JennyHillParker · 19h
What were the reasons? #mathscpdchat

Michael Slavinsky @michaelslav · 19h
V v few if any previous students on 6 @ GCSE succeeded in the past. Bear in mind that a majority of our y11s applying to 6F also do FM GCSE, we reasoned if they only got a 6 (while also doing extra maths) they'd struggle with A level demands. Not best choice for their future.

James MacNaughton @JamesMacNaughto · 18h
There's also pretty strong national data (admittedly from a few years ago)

Jenny Hill-Parker @JennyHillParker · 18h
Is there a link you can post? #mathscpdchat

… and this was the single comment:

Sarah Chancellor @SChancellor11 · 7h
There isn't a specific grade for Maths but there is for their overall grades. I only taught one kid with a level 7 last year, the rest were 8s and 9s.

To Jenny's third question …

Jenny Hill-Parker @JennyHillParker · 20h

Q3 - If you run taster sessions for A level Maths, what topic(s) do you cover? #mathscpdchat

… (probably because replies to her first question addressed this) there was just one response:

Mary Pardoe @PardoeMary · 20h

This is another book by @colinfoster77 that is likely to be helpful atm.org.uk/Shop/Ideas-for... ... and these examples from it might provide appropriate ideas on which to focus? #mathscpdchat

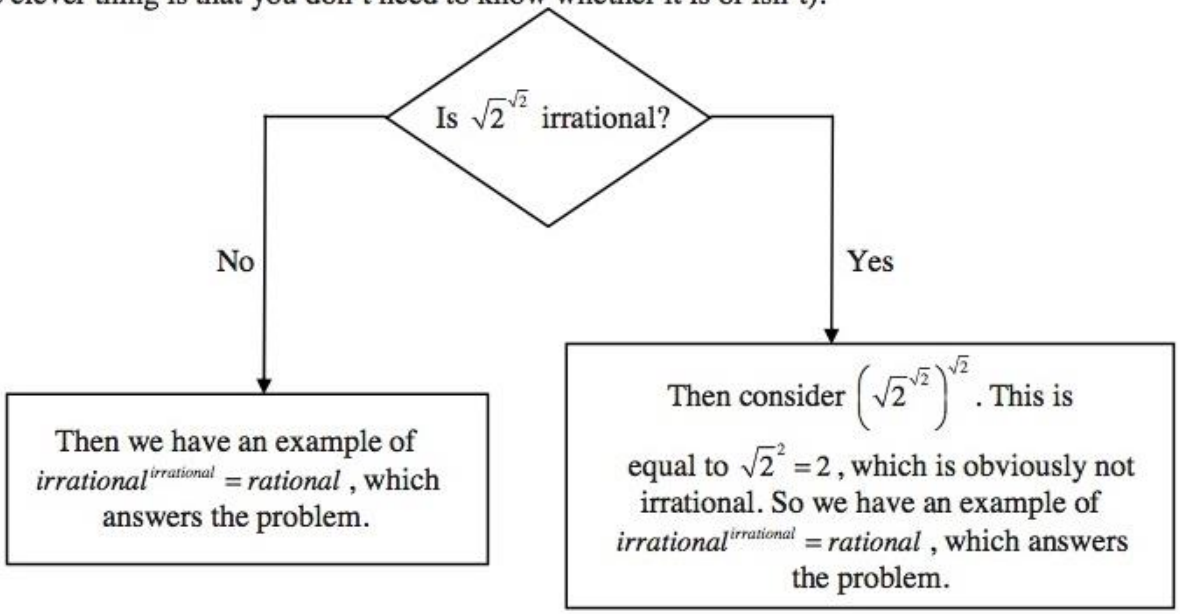
Pure Mathematics

$\sqrt{2}^{\sqrt{2}}$

- Do you think that it is possible to raise an irrational number to an irrational power and get a rational answer?

It *is* possible.

Suppose for example that $a = \sqrt{2}^{\sqrt{2}}$ and $b = \sqrt{2}$. Perhaps $\sqrt{2}^{\sqrt{2}}$ is irrational (in fact it is, but the clever thing is that you don't need to know whether it is or isn't).

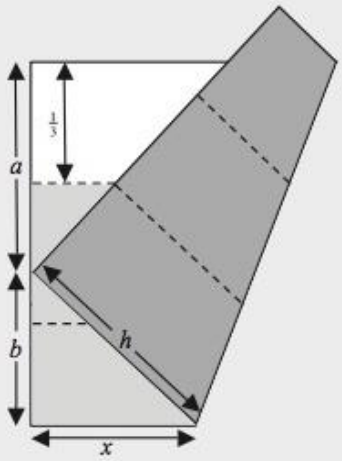


So either way the statement is proved.

This clever line of reasoning is an example of a 'non-constructive proof'. Often proving that numbers are irrational is very difficult. No-one knows whether π^{π}, e^{e} or $\frac{e}{\pi}$, for instance, are irrational.

Folding a cube root

- Fold a square piece of paper into three equal strips, parallel to the edge. (There are proper origami ways of doing this – find out about *Haga's Theorem*.)
- Then make the fold shown (the dashed lines show the folds into thirds.)
- Now show that $\frac{a}{b} = \sqrt[3]{2}$.



Jenny Hill-Parker @JennyHillParker · 20h

They're lovely examples! #mathscpdchat

Jenny's next question …

Jenny Hill-Parker @JennyHillParker · 20h

Q4 - What are the key topics from GCSE that students need to successfully study A level Maths? Do you highlight this to them throughout the GCSE course? **#mathscpdchat**

… prompted two conversations, and several single replies. Students' ability (or not) to use and apply competently 'GCSE-level' algebraic skills and understanding is an issue … as mentioned here …

Hannah @LorHRL · 20h

All the algebraic manipulation! Quadratics, algebraic fractions, simultaneous equations etc #mathscpdchat

Jenny Hill-Parker @JennyHillParker · 20h

Yes! And it begs the question of what to do with a student who has made the entry requirement for A level but doesn't have great algebraic skills #mathscpdchat

Hannah @LorHRL · 20h

We advise them it's a bad idea to continue with poor GCSE algebra skills but it's their choice so then just extra support to try and catch them up

… and here the focus was on checking students' existing understanding, rather than on providing glimpses of some of the kinds of interesting thinking in which they will soon be engaging:

Sam Blatherwick @blatherwick_sam · 20h
Algebraic manipulation, function notation #mathscpdchat

Sam Blatherwick @blatherwick_sam · 20h
Gradient, coordinates, shapes of functions #mathscpdchat

Jenny Hill-Parker @JennyHillParker · 20h
Definitely! Do you give your students any gateway tasks to do upon starting year 12 to check understanding? #mathscpdchat

Sam Blatherwick @blatherwick_sam · 20h
We're changing where we're starting.i think the yr 12 group I've got next year is starting with logarithms. Will probably start with lots of negative + fractional indices work, then show how they fit onto a continuous scale and how logs unlock that #mathscpdchat

Sam Blatherwick @blatherwick_sam · 20h
Will also show logarithm as an inverse function to an exponent and play around with that understanding

Jenny Hill-Parker @JennyHillParker · 20h
Do you show them this relationship graphically? #mathscpdchat

Sam Blatherwick @blatherwick_sam · 20h
I think I'd go back to this in the next module when we see graph transformations? #mathscpdchat

Paddy MacMahon @paddymac_maths · 20h
Ours are given some holiday work to complete. #mathscpdchat

Paddy MacMahon @paddymac_maths · 20h
Yes, it's mandatory, and forms the basis of the first few lessons. Available here: paddymacmahon.com/resources/pre-...

#mathscpdchat

paddymacmahon.com
paddy macmahon - pre-a level
Problems and resources that I've used with years 7-11.

Jenny Hill-Parker @JennyHillParker · 20h
Thank you Paddy, that's so generous of you #mathscpdchat

Rachel.Beddoes @GirlsCount_2 · 1h

amsp.org.uk/teachers/11-16..

We created these 'essential skills' resources for Transition to A level which have been super popular! You can see how teachers have used them and also discover our free online summer course for students here👉 amsp.org.uk/teachers/11-16... #mathscpdchat

amsp.org.uk

Transition to level 3 maths - AMSP

This was another suggestion …

Mary Pardoe @PardoeMary · 20h

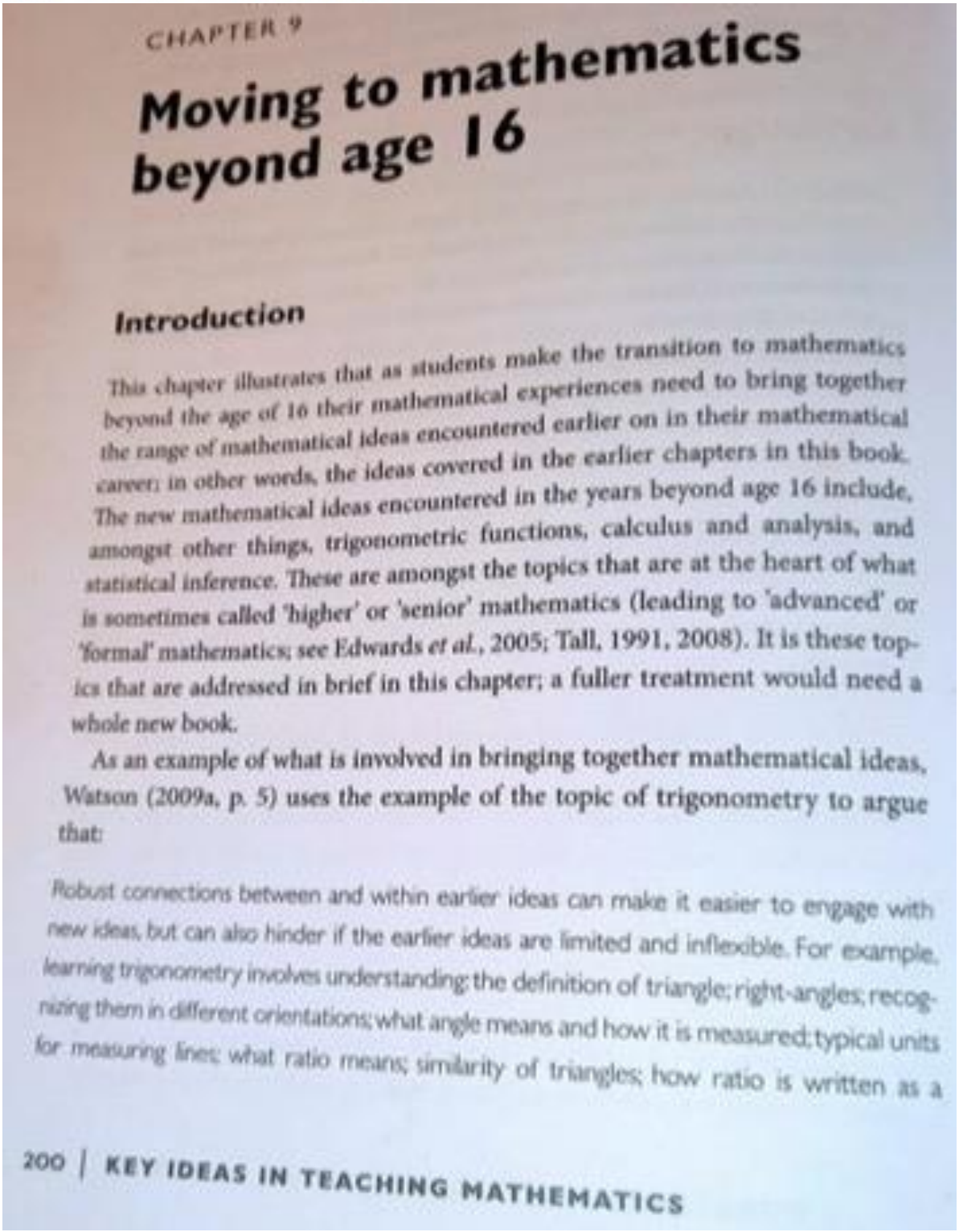
Chapter 6 from 'Key Ideas in Teaching Mathematics' by Anne Watson, Keith Jones and Dave Pratt provides very useful guidance about necessary previously acquired understandings ... link to book id on this page nuffieldfoundation.org/students-teach... #mathscpdchat

nuffieldfoundation.org

Key Ideas in Teaching Mathematics | Resources | Nuffield Foundation

These online resources accompany the book Key Ideas in Teaching Mathematics. Organised around seven key mathematical 'ideas', with...

Mary Pardoe @PardoeMary · 20h
... Chapter 6 ... #mathscpdchat



CHAPTER 9

Moving to mathematics beyond age 16

Introduction

This chapter illustrates that as students make the transition to mathematics beyond the age of 16 their mathematical experiences need to bring together the range of mathematical ideas encountered earlier on in their mathematical career; in other words, the ideas covered in the earlier chapters in this book. The new mathematical ideas encountered in the years beyond age 16 include, amongst other things, trigonometric functions, calculus and analysis, and statistical inference. These are amongst the topics that are at the heart of what is sometimes called 'higher' or 'senior' mathematics (leading to 'advanced' or 'formal' mathematics; see Edwards *et al.*, 2005; Tall, 1991, 2008). It is these topics that are addressed in brief in this chapter; a fuller treatment would need a whole new book.

As an example of what is involved in bringing together mathematical ideas, Watson (2009a, p. 5) uses the example of the topic of trigonometry to argue that:

> Robust connections between and within earlier ideas can make it easier to engage with new ideas, but can also hinder if the earlier ideas are limited and inflexible. For example, learning trigonometry involves understanding: the definition of triangle; right-angles; recognizing them in different orientations; what angle means and how it is measured; typical units for measuring lines; what ratio means; similarity of triangles; how ratio is written as a

200 | KEY IDEAS IN TEACHING MATHEMATICS

… as was the following reference to original material (also in response to Jenny's Q4 …repeated below):

Jenny Hill-Parker @JennyHillParker · 20h
Q4 - What are the key topics from GCSE that students need to successfully study A level Maths? Do you highlight this to them throughout the GCSE course? #mathscpdchat

Matt Man @mr_man_maths · 17h
Refer to my transition to A Level topics! #mathscpdchat

Matt Man @mr_man_maths · Jun 27
Here you go @JennyHillParker regarding Q4 #mathscpdchat

> **Matt Man** @mr_man_maths · Jun 25, 2022
> Quite a few people were asking about the "Crossover" between GCSE and A Level.
> Here are the topics that I shared at both #MathsConf28 and #MathsConf29.
> Can anyone else think of any topics that cross over between GCSE and A Level?

The images in Matt's [quoted tweet] have been enlarged for clarity:

CROSSOVER!

Topic No	Topic	A Level spec	GCSE spec
	Year 12		
1	Proof (by deduction and counterexample)	A1	A6
2	Laws of indices	B1	N7
3	Simplifying surds	B2	N8
4	Surds (Four operations)	B2	N8
5	Rationalising the denominator	B2	N8
6	Factorising quadratics	B3	A4
7	Solving quadratic equations (Factorising)	B3	A4
8	Completing the square	B3	A4
9	Quadratic formula	B3	A4
10	Quadratic graphs	B3	A11
11	Simultaneous equations (linear)	B4	A19
12	Simultaneous equations (linear and quadratic)	B4	A19
13	Simultaneous equations (graphs)	B4	A19
14	Solving linear inequalities	B5	A22
15	Solving quadratic inequalities	B5	A22

@mr_man_maths Preparing GCSE Pupils for A Level Maths

CROSSOVER!

Topic No	Topic	A Level spec	GCSE spec
	Year 12		
16	Inequality regions	B5	A22
17	Expanding triple brackets	B6	A4
18	Sketching cubic graphs	B7	A12
19	Sketching reciprocal graphs	B7	A12
20	Transformations of graphs (Translation)	B9	A13
21	Transformations of graphs (Reflection)	B9	A13
	Equation of a straight line	C1	A10
	Parallel and perpendicular lines	C1	A9
24	Equation of a circle and equation of tangent to a circle at a given point	C2	A16
25	Sine rule	E1	G22
26	Cosine rule	E1	G22
27	Area of a triangle (non right angled)	E1	G23
28	Trigonometric graphs	E3	A12
29	Solving trigonometric equations using graphs	E7	A12
30	Sketching exponential graphs	F1	A12

CROSSOVER!

Topic No	Topic	A Level spec	GCSE spec
	Year 12		
31	Estimating gradient of graphs	G1	A15
32	Vector notation and arithmetic	J3	G25
33	Vector geometry proof	J5	G25
34	Sampling	K1	S1
35	Histograms	L1	S3
36	Scatter diagrams	L2	S6
	Averages and range from list of data (Mean, median, mode, LQ, UQ, IQR)	L3	S4
	Averages from tables	L3	S4
39	Cumulative frequency curves and box plots	L1	S4
40	Mutually exclusive and independent events	M1	P8
41	Venn diagrams	M2	P9
42	Tree diagrams	M2	P9
43	Kinematics formulae (link to rearranging formulae?)	Q3	R11
44	Displacement time graphs	Q2	A15
45	Velocity time graphs	Q2	A15

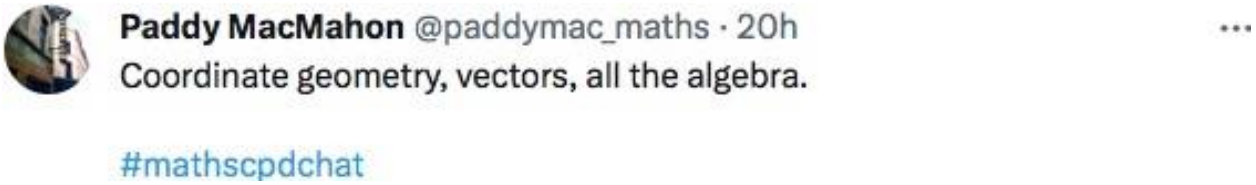
@mr_man_maths Preparing GCSE Pupils for A Level Maths

CROSSOVER!

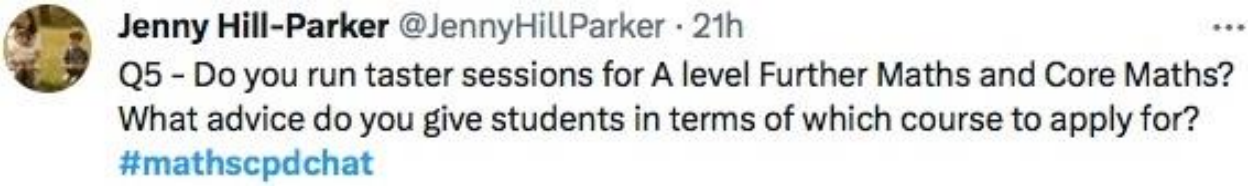
Topic No	Topic	A Level spec	GCSE spec
	Year 13		
46	Simplifying algebraic fractions	B6	A4
47	Algebraic fractions - four operations	B6	A4
48	Composite functions	B8	A7
49	Inverse functions	B8	A7
50	Nth term of arithmetic sequence	D4	A25
51	Locating roots of equations such as f(x) = 0	I1	A20
	Conditional probability (Two way tables, Venn, tree diagrams)	M2	P9

@mr_man_maths Preparing GCSE Pupils for A Level Maths

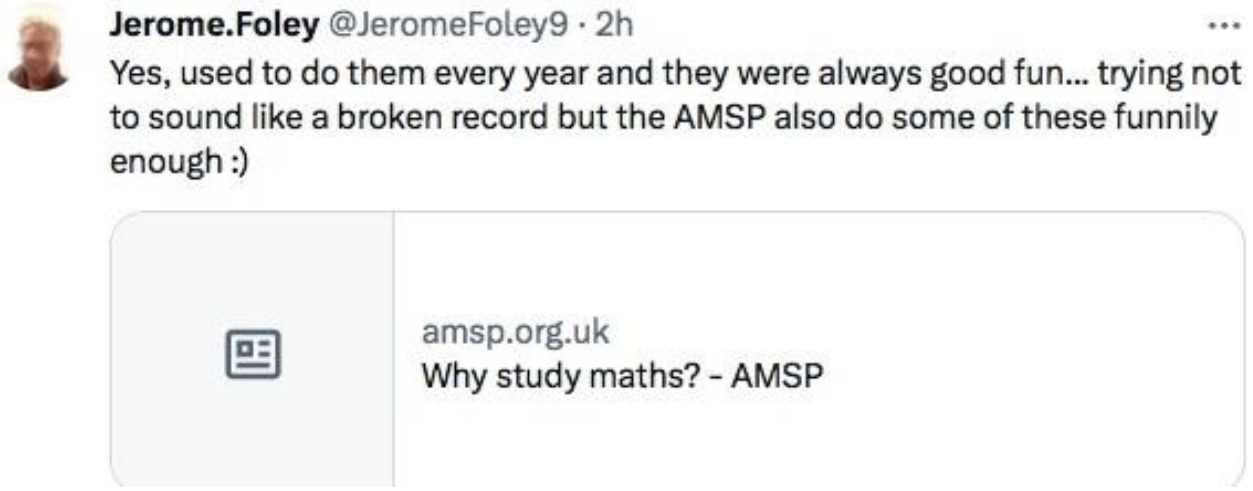
There was also this single reply to Q4:



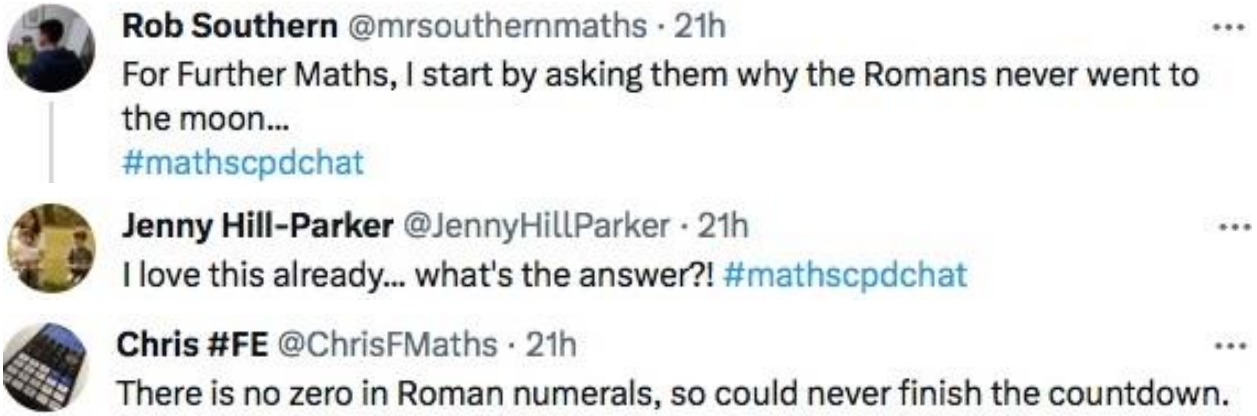
In response to Jenny's fifth question …



… there were two single replies …



… and this conversation:



Rob Southern @mrsouthernmaths · 21h
We do a countdown from ten in Roman numerals. I really big it up and make them chant with me.
The problem is, the Romans didn't have a symbol for zero, so the rocket could never take off.
#mathscpdchat

Paddy MacMahon @paddymac_maths · 21h
They had all the rest of the technology though. Just that one stumbling block...

Rob Southern @mrsouthernmaths · 21h
That's what I always say to the students! "One of the greatest civilisations in human history, they conquered half the known world, you think they couldn't build a rocket?!?"

Rob Southern @mrsouthernmaths · 21h
So, first we extend the number line to include negative numbers, then we rotate it to include complex numbers. Then we go from there.
#mathscpdchat

Jenny's sixth and last question …

Jenny Hill-Parker @JennyHillParker · 21h
Q6 - What startegies do you have in place to support students over the transition period from GCSE Maths to A level? Do you have a transition booklet, or know of good ones that are available? **#mathscpdchat**

… prompted these suggestions …

Hannah @LorHRL · 21h

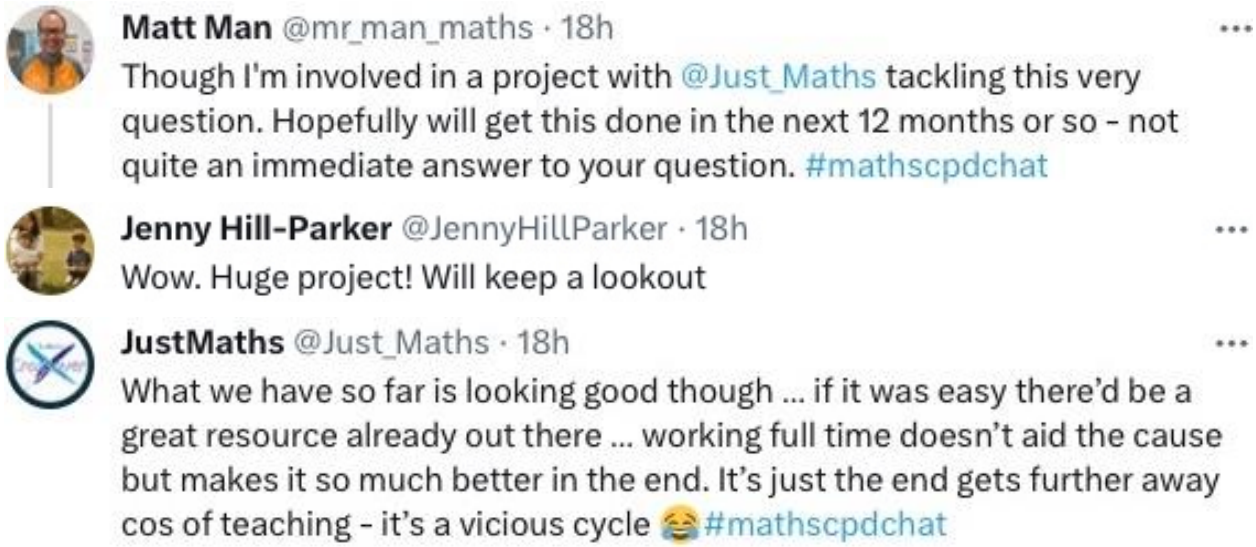
amsp.org.uk
Transition to level 3 maths - AMSP

Rachel.Beddoes @GirlsCount_2 · 3h

Sorry - have mentioned this already amsp.org.uk/teachers/11-16.. but didn't say that there is a printable version.... #mathscpdchat

amsp.org.uk
Transition to A level Mathematics: Essential Skills - AMSP

… and this notice about a project in progress:



Towards the end of the chat, the host, Jenny, posted the following thread of tweets. It contains links to a variety of useful resources for exploration by those teachers who are planning to provide A level Maths 'Taster Days':

Jenny Hill-Parker @JennyHillParker · Jun 27

The last ten minutes are a resource thread of activities/resources to support the transition from GCSE Maths to A level.
Please add to it/retweet it!
I'll start;
eur01.safelinks.protection.outlook.com/?url=https%3A%
#mathscpdchat

amsp.org.uk
Resource - AMSP

Jenny Hill-Parker @JennyHillParker · Jun 27

A page of advice and resources from @MathedUp

mathedup.co.uk
Getting a taste - MathedUp!
This post was prompted by a tweet from @rufuswilliam who asked about A-level taster sessions for year 11s in today's #mathsTLP chat ...

Jenny Hill-Parker @JennyHillParker · Jun 27

A set of transition videos from @PearsonSchools
pearson.com/uk/educators/s.

Jenny Hill-Parker @JennyHillParker · Jun 27

A blog post with links by @mathsjem
resourceaholic.com/2017/07/bridgi...

Jenny Hill-Parker @JennyHillParker · Jun 27

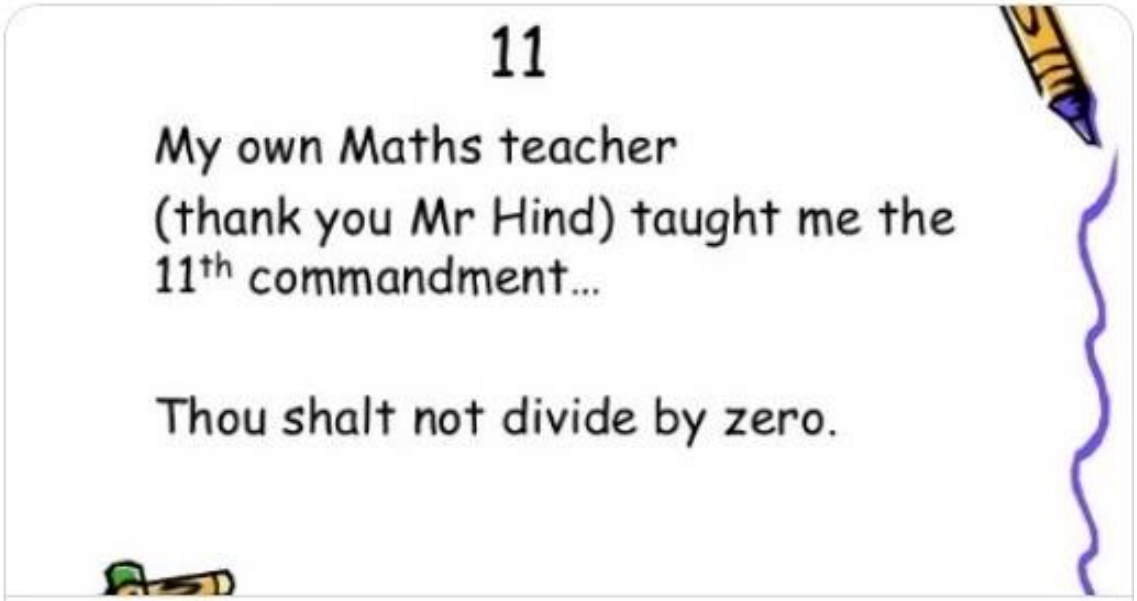
A lovely task taken from one of @mathsjem's Maths Gems on her brilliant resourceaholic.com

drive.google.com/file/d/0B9L2IY... #mathscpdchat

drive.google.com
Find the coordinates.pdf

Jenny Hill-Parker @JennyHillParker · Jun 27

@ColleenYoung has some brilliant resources on her page here;



colleenyoung.org
Taster Lessons
Around this time of year, many UK schools will have taster sessions as part of a Sixth Form Welcome Event. What to do for such lessons? I ca...

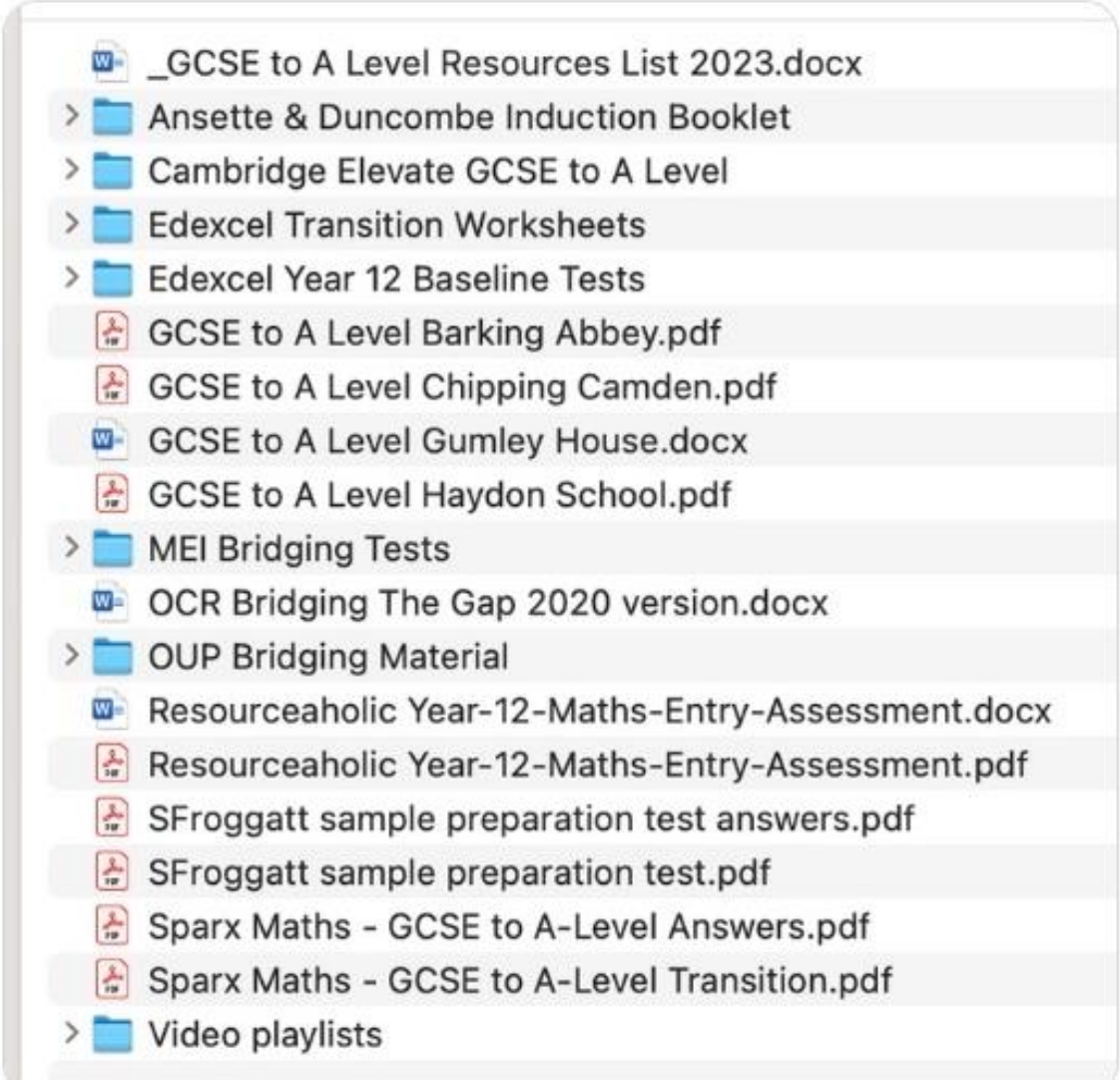
Jenny Hill-Parker @JennyHillParker · Jun 27

Advice from @OCR_Maths
ocr.org.uk/blog/transitio... #mathscpdchat

This thread was extended when a contributor provided the link to his large collection of links to very useful relevant and interesting resources (some of which other people shared separately):

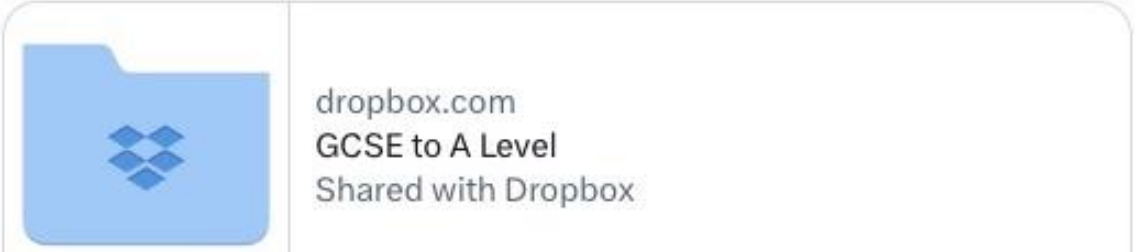
RobotMaths @robotmaths · Jun 27

Download all these files and more from b.link/gcsetoalevel



RobotMaths @robotmaths · Jun 27

The resources list at the top of the Dropbox has got lists of resources, links to online-only Summer prep work, baseline assessments to use with Year 12, video playlists, and a list of physical books you can to give to students
b.link/gcsetoalevel
#mathscpdchat



Jenny Hill-Parker @JennyHillParker · Jun 27

Wow! Thank you very much, very generous of you!
#mathscpdchat

This was the host's closing message:

Jenny Hill-Parker @JennyHillParker · Jun 27

That's it! 4 minutes over but I didn't want to leave out any content. I have a few more resources for the GCSE - A level Maths megathread, so check back for a few more.
Thanks for coming everyone!